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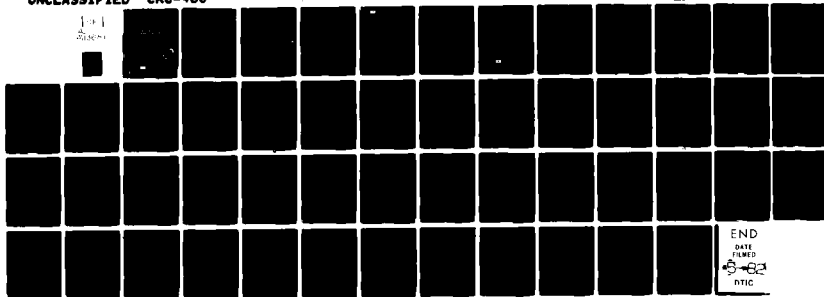
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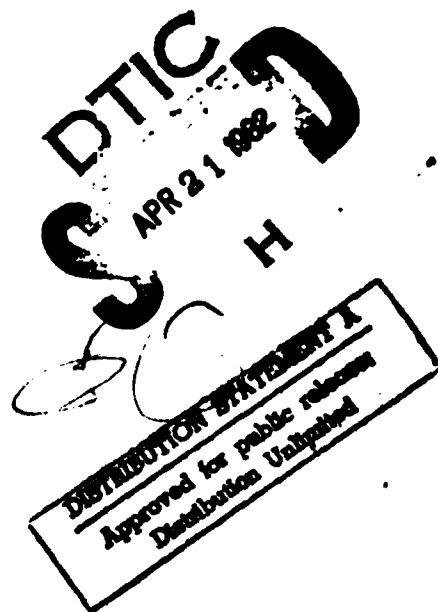
# TWO-TERM SURVIVAL OF FEMALE PERSONNEL

Philip M. Lurie

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As expected, educational level has the greatest impact on survival. Women with a high school diploma survive an average of 3-4 months longer than those with a GED certificate. The effect of mental group on survival is quite different for A school and non-A school attendees. Survival across mental groups is essentially constant for A school attendees but displays a downward trend as mental group declines for non-A school attendees.

For A school attendees, there appears to be a generally increasing trend in survival as age increases. Purely from the standpoint of survival, ages 22 and older are the optimal recruiting ages for these recruits. On the other hand, non-A school attendees exhibit the opposite pattern of survival with respect to age, but to a lesser degree. These recruits have an optimal recruiting age of 17-22.

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## **TWO-TERM SURVIVAL OF FEMALE PERSONNEL**

Philip M. Lurie



*Naval Studies Group*

**CENTER FOR NAVAL ANALYSES**

2000 North Beauregard Street, Alexandria, Virginia 22311



## ABSTRACT

Survival curves for NPS female recruits were estimated through eight years of service using the FY 1979 cross-sectional data base. Separate analyses were performed for Class A school attendees and non-A school attendees, holding constant the effects of age, educational level, and mental group. Mean survival times (the areas under the survival curves) were then calculated for each recruit profile. We found that no further screening based on expected months of service is feasible. This is largely due to the fact that the NPS female population is already highly screened.

As expected, educational level has the greatest impact on survival. Women with a high school diploma survive an average of 3-4 months longer than those with a GED certificate. The effect of mental group on survival is quite different for A school and non-A school attendees. Survival across mental groups is essentially constant for A school attendees but displays a downward trend as mental group declines for non-A school attendees.

For A school attendees, there appears to be a generally increasing trend in survival as age increases. Purely from the standpoint of survival, ages 22 and older are the optimal recruiting ages for these recruits. On the other hand, non-A school attendees exhibit the opposite pattern of survival with respect to age, but to a lesser degree. These recruits have an optimal recruiting age of 17-22.

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## INTRODUCTION

This is a companion report to a survival analysis of NPS male enlistees using the FY 1979 cross-sectional data base [1]. The analyses performed here are identical to those performed in [1], with the exception that they are applied to NPS females. The main data base consists of all NPS female enlistees in the Navy as of 31 December 1978. These women were followed until the end of calendar 1979. Then all NPS female accessions into the Navy during 1979 were added to the data base. The total population represents approximately 30,000 women. Since each individual in the data base can be tracked back to her date of enlistment, we are able to estimate entire career survival patterns, i.e., survival chances through 30 years of service. However, there are very few women in the Navy with more than two terms of service. For the purpose of this report, then, we consider it adequate to track female enlistees through eight years of service.

The ultimate objective of this analysis is to derive a SCREEN table for women similar to the one derived in [1] for men. The SCREEN table is based on the survival curves of recruits with different background characteristics. However, the entire survival curves, though interesting in themselves, would be of little help to recruiters in qualifying applicants for enlistment. We therefore decided to summarize survival with the mean survival time (the area under the survival curve) measured in months. Although it is impossible (except under very special conditions) to capture all the information in a survival curve from a single summary measure, the entire survival curve is needed to compute the mean survival time, and we feel that this figure is preferable to a simple point-in-time estimate. If the mean survival time is multiplied by the number of recruits entering the Navy in a particular year, the expected woman-months of survival for that cohort is obtained.

Survival curves through eight years of service were calculated for each combination of educational level (high school graduate or GED), mental group (1-4), and age (17-24,  $\geq$  25). Since the women in our data base entered the Navy over a 30-year period, many different test batteries were used in computing mental group. Consequently, to make the various test results comparable, we converted each form to the current FY 1981 AFQT norms [2].

# FIRST-TERM SURVIVAL

This section is concerned with the estimation of continuous survival curves through four years of service. However, because NPS females are already a highly screened population, we are far less likely to uncover any significant variations in survival due to differing levels of recruit characteristics than we were with NPS males. Thus, a new SCREEN table for women is likely to be of only marginal value to the Navy.

Separate survival analyses were performed for Class A school attendees and non-A school attendees. By definition, a non-A school attendee is any recruit for whom we found no indication on the Enlisted Master Record of ever having attended A school. To be classified as an A school or non-A school attendee, however, a recruit must first have completed recruit training (RTC). The probabilities of completing RTC were estimated for the 1979 cohort with a probit model adjusting for mental group, educational level, and age. The probit coefficients are shown in appendix A, and the estimated probabilities are shown in table 1.

TABLE 1  
PROBABILITIES OF COMPLETING RTC

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.84	0.85	0.83	0.84	0.85	0.82	0.81	0.82	0.79
	HSG	0.92	0.93	0.92	0.93	0.93	0.91	0.91	0.91	0.89
2	GED	0.83	0.85	0.83	0.84	0.84	0.82	0.80	0.82	0.79
	HSG	0.92	0.92	0.92	0.92	0.93	0.91	0.90	0.91	0.89
3U	GED	0.81	0.82	0.80	0.81	0.82	0.79	0.78	0.79	0.76
	HSG	0.91	0.92	0.90	0.91	0.91	0.89	0.89	0.89	0.87
3L	GED	0.78	0.80	0.77	0.79	0.79	0.76	0.74	0.76	0.73
	HSG	0.89	0.90	0.88	0.89	0.90	0.87	0.86	0.87	0.85
4	GED	0.78	0.80	0.77	0.79	0.79	0.76	0.74	0.76	0.72
	HSG	0.89	0.90	0.88	0.89	0.90	0.87	0.86	0.87	0.85

To qualify for enlistment today, all female recruits must have a high school diploma or its equivalent, and if not guaranteed schooling, must be in mental group 3L or above. No mental group 4C or 5 recruits



qualify for enlistment. However, due to the ASVAB renorming, we find recruits in the population who should have been screened out.

Once recruits complete RTC, we determine the effects of pre-service characteristics on survival. The coefficients from the yearly Cox regressions that estimate these effects are shown in appendix B for A school attendees and in appendix C for non-A school attendees. The pattern of coefficients over time is far more difficult to interpret for NPS females than it was for NPS males. For males, the impact of pre-service recruit characteristics generally lessened by the time four years of service were completed. For females, the corresponding coefficients fluctuate greatly over time, although most coefficients are not statistically significant. An important fact to note, however, is that educational level (which for men is the most important predictor of survival) has a significant impact on women's survival only in the first two years of service for A school attendees and only in the first year for non-A school attendees.

For each combination of recruit characteristics, we estimated survival curves through four years of service using the non-proportional hazards generalization of the Cox regression model [3]. As examples, some curves are plotted in figures 1 and 2. The mean survival times, obtained as the area under the curves, are shown in table 2 for A school attendees and in table 3 for non-A school attendees.

TABLE 2  
MEAN SURVIVAL TIMES FOR A SCHOOL ATTENDEES (IN MONTHS)

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	33.6	35.1	34.7	35.7	33.0	36.3	34.1	36.7	37.5
	HSG	37.0	38.3	38.2	39.0	37.3	39.1	38.1	39.8	40.5
2	GED	33.7	35.6	34.7	35.2	33.4	36.1	34.3	37.3	37.4
	HSG	36.7	38.4	38.0	38.3	37.5	38.6	38.2	40.2	40.2
3U	GED	34.4	36.3	35.1	35.3	33.7	36.8	34.5	37.9	37.5
	HSG	37.3	39.0	38.4	38.4	37.9	39.0	38.4	40.7	40.4
3L	GED	33.5	35.5	34.6	34.9	33.5	35.8	34.3	37.3	37.2
	HSG	36.4	38.2	37.8	37.9	37.6	38.2	38.0	40.1	40.1
4	GED	32.6	34.6	33.3	33.6	31.6	35.1	32.6	36.2	35.9
	HSG	35.9	37.8	37.1	37.2	36.3	37.9	37.0	39.5	39.3

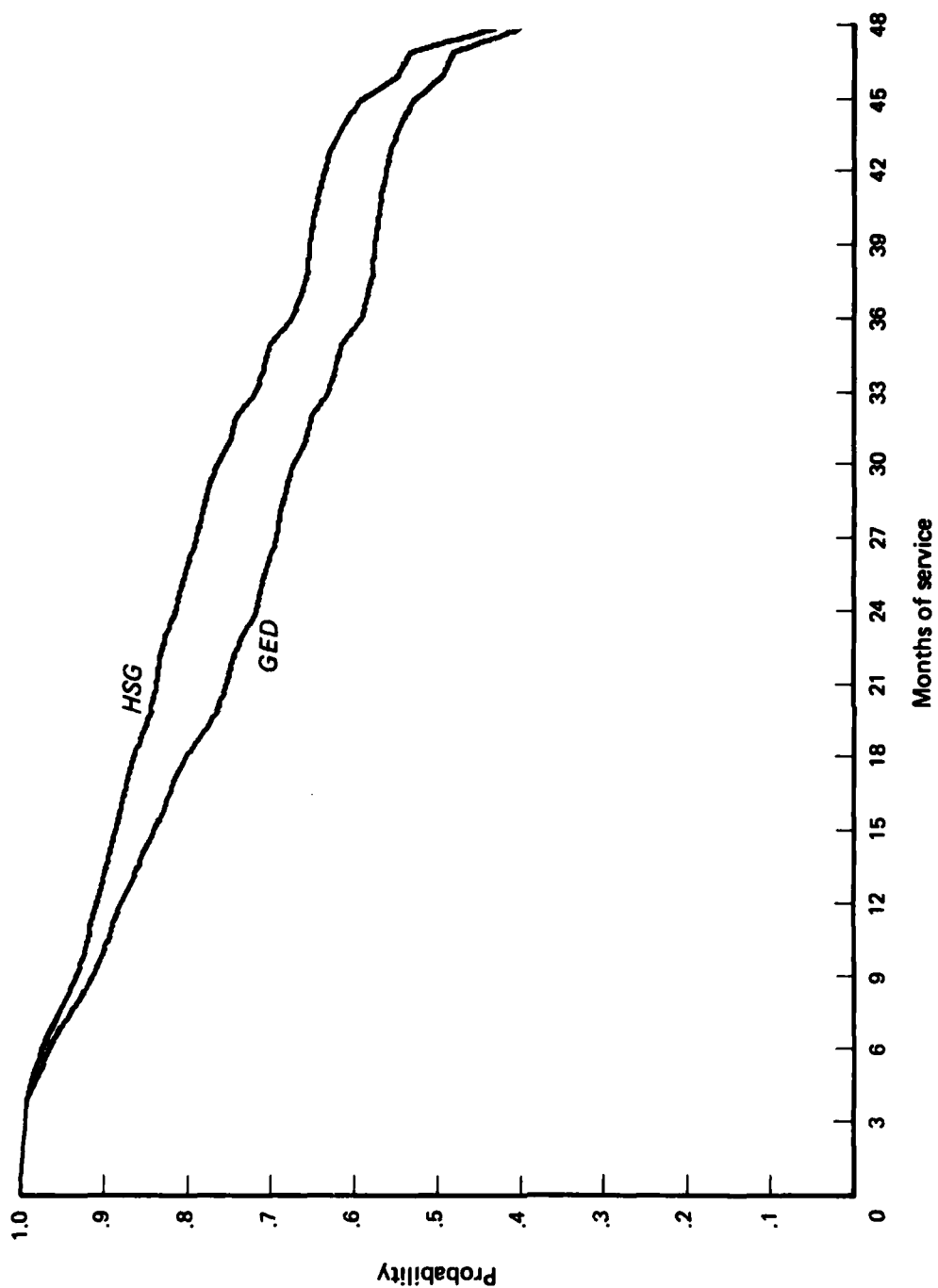


FIG. 1: FIRST-TERM SURVIVAL OF A SCHOOL ATTENDEES:  
AGE = 18, MENTAL GROUP = 2

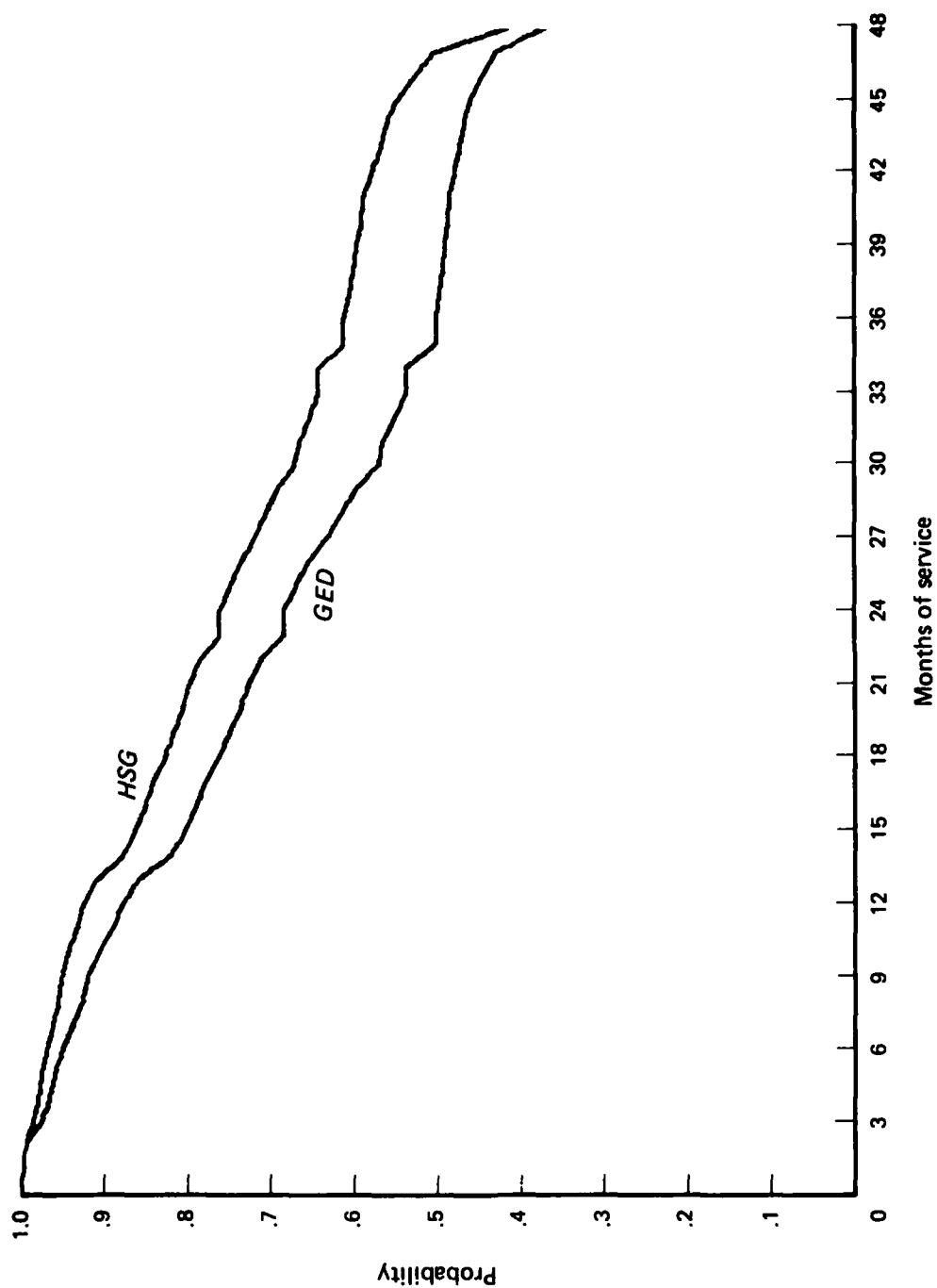


FIG. 2: FIRST-TERM SURVIVAL OF NON-A SCHOOL ATTENDEES:  
AGE = 18, MENTAL GROUP = 3U

TABLE 3

## MEAN SURVIVAL TIMES FOR NON-A SCHOOL ATTENDEES (IN MONTHS)

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	37.0	37.6	37.7	38.2	35.9	36.7	35.7	34.7	36.5
	HSG	39.2	40.0	39.7	40.4	38.3	38.7	38.6	37.4	39.0
2	GED	32.7	32.8	32.8	33.6	30.9	33.8	30.5	30.0	31.9
	HSG	36.1	36.3	36.1	36.9	34.6	37.0	34.5	33.9	35.6
3U	GED	33.1	33.3	33.2	34.0	31.4	34.2	31.1	30.5	32.4
	HSG	36.4	36.7	36.3	37.1	34.8	37.2	34.9	34.2	35.9
3L	GED	29.4	29.4	29.5	30.4	27.3	30.7	27.1	26.6	28.8
	HSG	33.3	33.3	33.2	34.1	31.3	34.4	31.5	30.8	32.9
4	GED	30.2	30.0	30.5	31.2	27.8	31.2	28.3	27.7	30.1
	HSG	33.9	33.7	34.0	34.8	31.6	34.6	32.4	31.6	33.9

From these tables, it is quite clear that the variable with the greatest impact on survival is educational level. High school graduates remain in the Navy an average of 3-4 months longer than GEDs. This compares with a 7-8 month differential for NPS males. Other patterns emerge when we plot the mean survival times of high school graduates and GEDs against age and mental group. They are shown in figures 3-6. For A school attendees, there appears to be a generally increasing trend in survival as age increases. Purely from the standpoint of survival, ages 22 and older are the optimal recruiting ages for these recruits. In this case, it is infeasible to use age as a screening device for A school attendees, since this would disqualify younger recruits who make up the bulk of the potential enlistment pool. For non-A school attendees, a generally downward trend in survival is apparent. These recruits have an optimal recruiting age of 17-22. This is potentially useful for further screening.

As regards mental group, its effect on survival is markedly different for A school and non-A school attendees. Survival across mental groups is essentially constant for A school attendees but displays a downward trend as mental group declines for non-A school attendees. The latter observation is in sharp contrast to the results obtained for NPS males, where non-A school attendees have the exact opposite (i.e., increasing) pattern of survival.

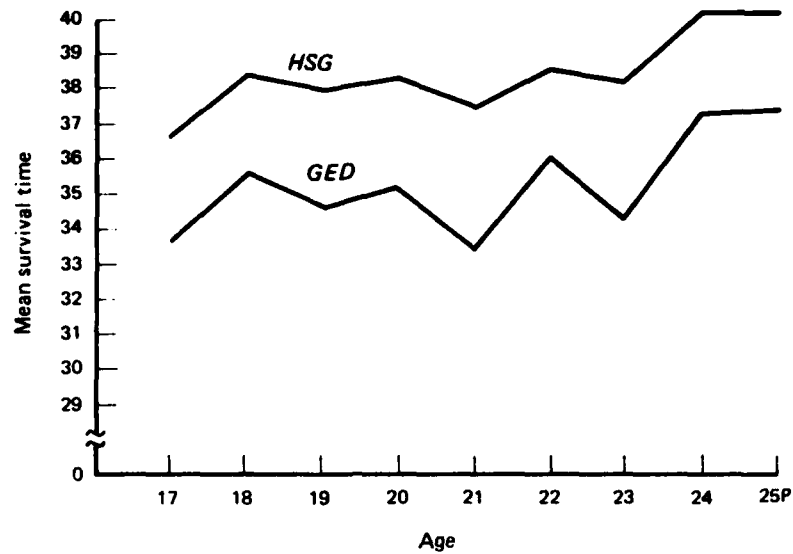


FIG. 3: MEAN SURVIVAL BY AGE FOR A SCHOOL ATTENDEES: MENTAL GROUP = 2

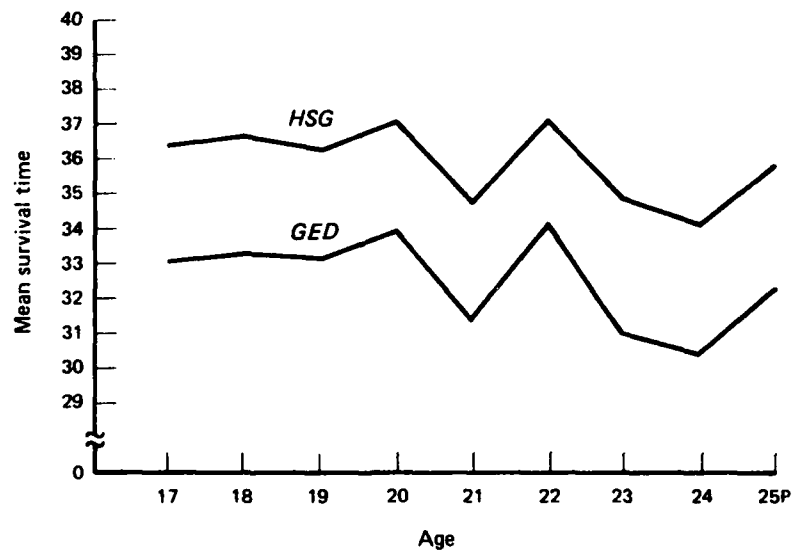


FIG. 4: MEAN SURVIVAL BY AGE FOR NON-A SCHOOL ATTENDEES: MENTAL GROUP = 3U

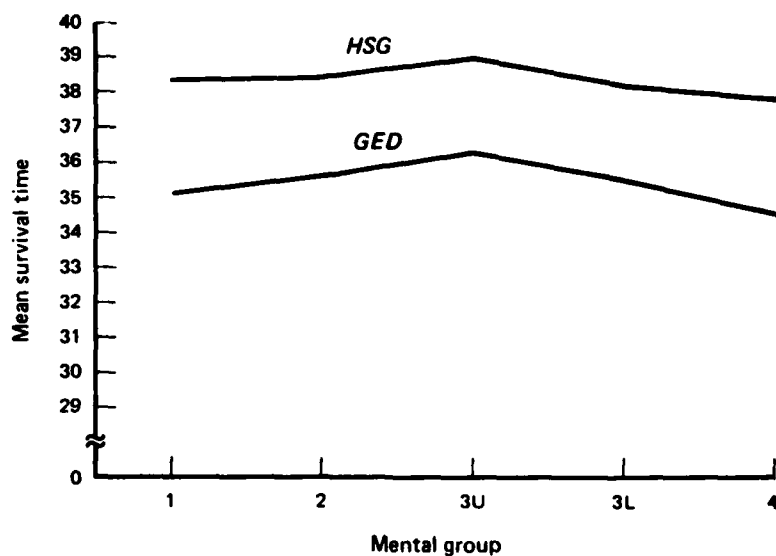


FIG. 5: MEAN SURVIVAL BY MENTAL GROUP FOR  
A SCHOOL ATTENDEES: AGE = 18

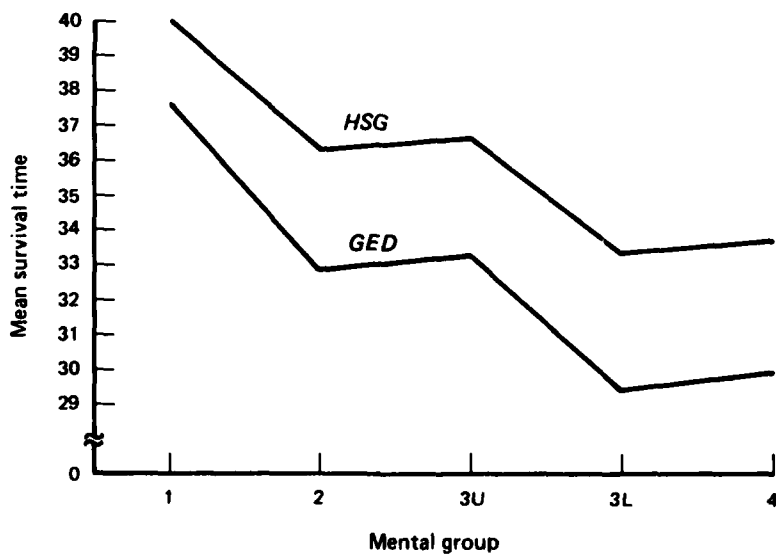


FIG. 6: MEAN SURVIVAL BY MENTAL GROUP FOR  
NON-A SCHOOL ATTENDEES: AGE = 18

## SECOND-TERM SURVIVAL

Strictly speaking, this section deals with survival through 4-8 years of service. Since six-year obligors (6 YO's) and extenders are included in the data base, some first-termers are used in calculating the probabilities of surviving the next four years of service.

The impact of pre-service characteristics on survival was determined only through five years of service. After that, sample sizes were too small to get an accurate determination. Consequently, a Life Table analysis [3] was performed to estimate survival through years 6-8. Thus, survival over the last three years of service is not adjusted for pre-service characteristics.

An examination of the coefficients of pre-service characteristics in appendix B shows that only age has a significant impact on survival in the fifth year of service for A school attendees. The coefficients show older women (age 21 and over) to have a slightly improved chance of survival over that 1-year period of service. For non-A school attendees, the coefficients in appendix C show that none of the pre-service characteristics has any further impact on survival once four years of service have been completed.

Appendices D and E give the yearly survival estimates for A school attendees and non-A school attendees, respectively. Remember that reservists (with a 3-year active duty obligation), 6 YO's, and extenders are all included in the data base, so that survival estimates after four years are lower than if only reenlistees were considered. We think these estimates are useful, however, because they represent the survival behavior of the entire active force of NPS females.

Figures 7 and 8 extend the survival curves of figures 1 and 2 through eight years of service. Tables 4 and 5 show the mean survival times up to eight years of service for each combination of recruit characteristics. They were obtained as the areas under the 8-year survival curves. Note that the survival curves practically coincide after four years of service. This is partly due to the small sample sizes observed in years 6 through 8, which do not allow us to estimate any differences that may exist. Thus, since the curves come close together at four years of service, they remain that way thereafter. For this reason, we can be certain that the mean survival times over eight years of service contain only a minimal amount of information more than those obtained over four years of service.

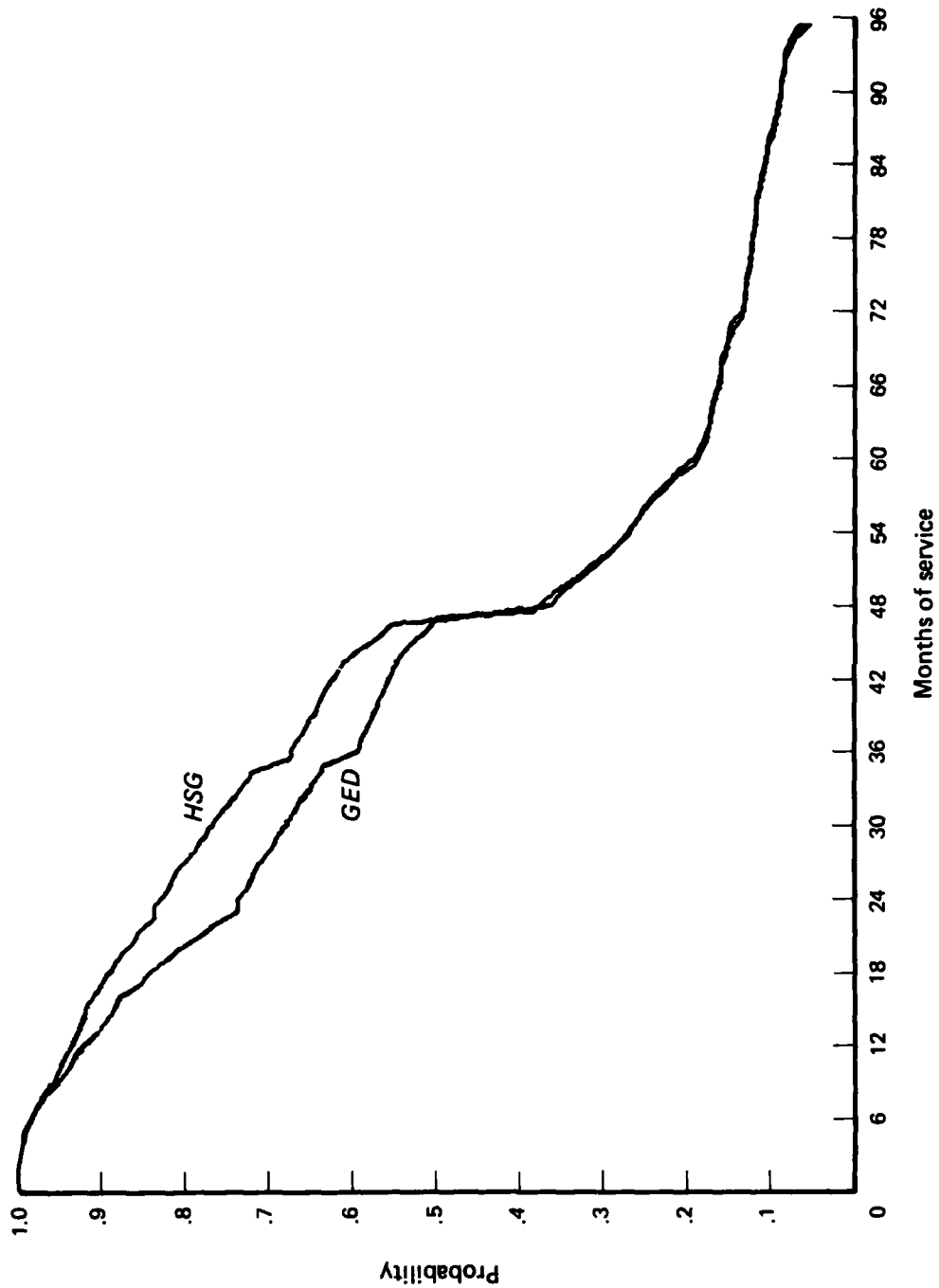


FIG. 7: TWO-TERM SURVIVAL OF A SCHOOL ATTENDEES:  
AGE = 18, MENTAL GROUP = 2



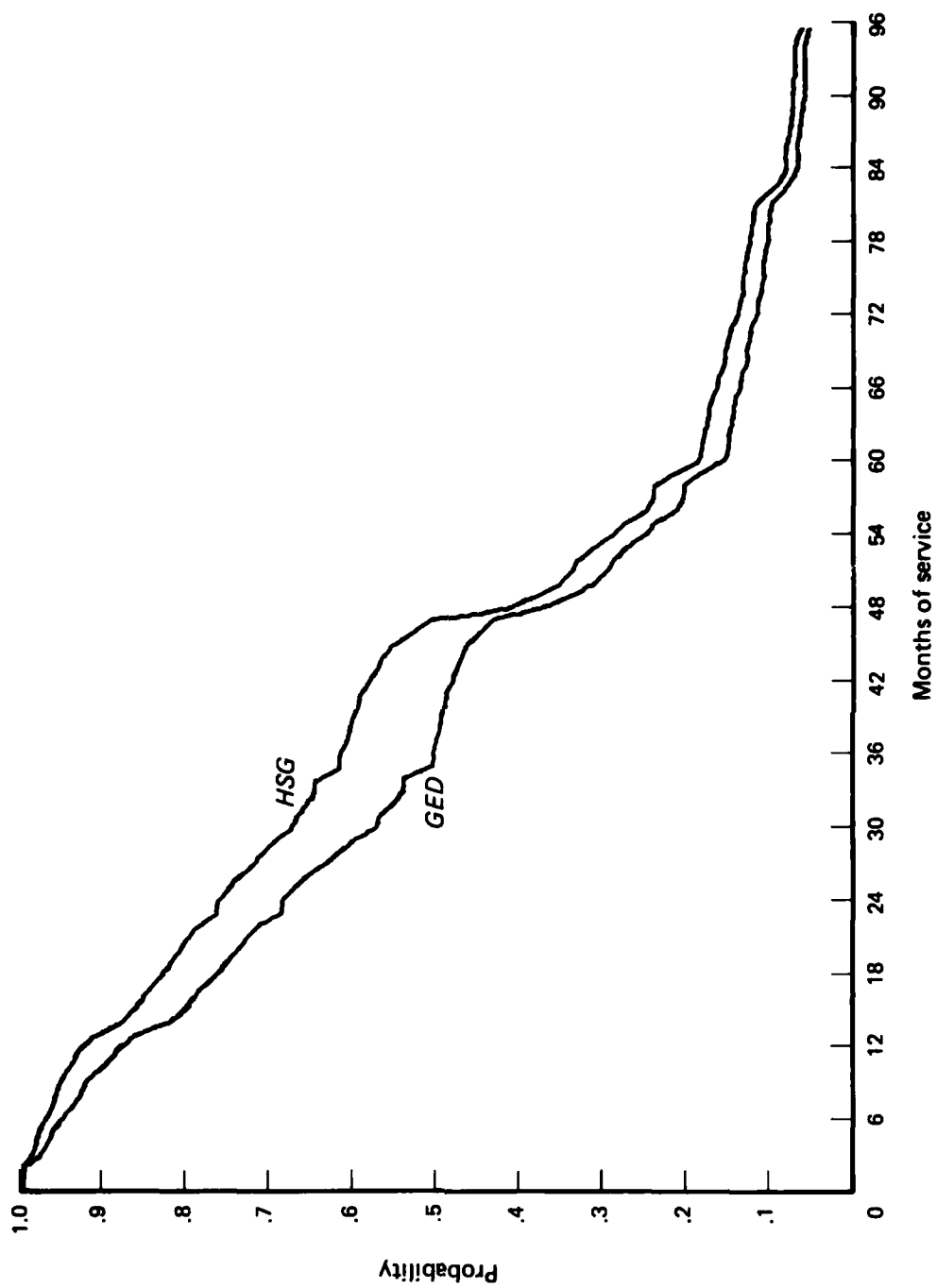


FIG. 8: TWO-TERM SURVIVAL OF NON-A SCHOOL ATTENDEES:  
AGE = 18, MENTAL GROUP = 3U

TABLE 4

MEAN SURVIVAL TIMES UP TO 8 YEARS OF SERVICE  
FOR A SCHOOL ATTENDEES

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	40.0	44.1	44.0	44.5	41.1	46.3	44.8	48.3	49.6
	HSG	43.5	47.6	48.1	48.3	46.2	49.4	50.0	52.1	53.2
2	GED	39.6	44.2	43.5	43.2	41.4	45.3	44.6	48.8	49.0
	HSG	42.7	47.3	47.4	46.8	46.4	48.0	49.7	52.3	52.4
3U	GED	39.3	44.0	42.8	42.3	40.5	44.7	43.7	48.7	47.7
	HSG	42.2	46.9	46.5	45.7	45.4	47.2	48.6	51.9	51.1
3L	GED	38.4	43.0	42.3	41.9	40.6	43.8	43.7	47.8	47.8
	HSG	41.3	45.9	45.9	45.2	45.4	46.3	48.4	51.1	51.0
4	GED	37.5	42.3	40.7	40.5	37.7	43.1	40.8	47.2	45.7
	HSG	40.9	45.8	45.1	44.6	43.4	46.2	46.5	51.4	49.7

TABLE 5

MEAN SURVIVAL TIMES UP TO 8 YEARS OF SERVICE  
FOR NON-A SCHOOL ATTENDEES

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	41.0	43.7	42.4	45.6	41.0	38.6	42.7	37.2	42.4
	HSG	42.8	46.2	44.0	47.5	42.8	40.1	45.2	39.3	44.2
2	GED	38.5	39.2	39.0	42.1	37.8	38.5	38.4	34.5	40.3
	HSG	43.0	44.3	43.3	46.9	42.9	42.1	44.1	39.1	45.2
3U	GED	38.7	39.9	39.2	42.4	38.1	38.4	38.9	34.6	40.4
	HSG	42.6	44.4	43.0	46.6	42.4	41.3	43.9	38.6	44.5
3L	GED	33.6	34.1	34.1	36.8	31.6	33.8	32.8	29.5	34.9
	HSG	38.3	39.5	38.7	41.9	36.7	37.7	38.6	34.2	39.9
4	GED	34.0	34.4	34.8	37.3	31.2	33.7	33.6	30.1	35.7
	HSG	38.1	39.4	38.9	41.9	35.8	37.0	38.8	34.3	40.0

## DETERMINING QUALIFYING SCORES

Before tables 2 and 3 can be used for recruit screening, it is necessary to streamline them and determine qualifying scores, i.e., cutoff points. The qualifying scores are determined by means of a cost-benefit analysis that considers the cheapest way of selecting recruits who survive longer but cost more.

To be classified as an A school or non-A school attendee, a recruit must first have completed RTC. A streamlined version of table 1, which gives probabilities of completing RTC, is shown in table 6. The cost of putting a recruit through RTC is approximately \$2500 in 1981 dollars. The 1979 figure of \$2165 was obtained from CNET and adjusted for inflation.

Table 7 shows the effects of possible qualifying scores compared to the lowest score, which would let in an entire cohort. The data are scaled to the FY 1981 goal of 10,000 NPS females. All dollar amounts are expressed in 1981 dollars.

TABLE 6

### STREAMLINED PROBABILITIES OF COMPLETING RTC

Mental Group	17-21		22+	
	HSG	GED	HSG	GED
1	93	84	90	81
2	92	84	90	80
3U	91	81	88	78
3L	89	79	86	74
4	89	79	86	74

If the only objective is to maintain the same endstrength at the end of RTC, table 7 indicates that it always costs more to be more selective than to simply allow all prospective recruits to enlist as they have been. This is because the cost of recruiting higher quality individuals more than offsets the savings realized by putting fewer recruits through RTC.

Tables 8 and 9 give streamlined mean survival times for A school attendees and non-A school attendees, respectively. Since women 22 and over who attend A school have a longer expected survival than younger women, it is doubtful that any screening policy based on table 8 will be very useful. This is because the first ones to be screened out will be younger women, who comprise the bulk of the potential recruit pool.

TABLE 7  
RTC SCREEN QUALIFYING SCORE EFFECTS PROJECTED FOR FY 1981 NPS FEMALES  
(Numbers in thousands, dollars in millions)

Qualifying score	Qualified		2 RTC losses	Number completing RTC	Additional recruits to make 8.75%	Recruit goal - f qualified + add'l recruits	Reduction from 10.0	Savings - reduction x \$2.5	Percent of goal b		Cost - \$2.5a + \$1.5C	Additional recruits		Net savings d
	z	f							A	C		f	Cost	
74	100.0	10.0	11.0	8.9	0.0	10.0	0.0	0.0	58	28	2.0	0.0	0.0	0.0
79	98.1	9.8	11.8	8.8	0.2	10.0	0.0	0.0	59	28	2.0	0.2	0.4	-0.4
80	94.3	9.4	10.2	8.5	0.5	9.9	0.1	0.3	61	29	2.1	0.5	1.1	-0.6
82	88.9	8.9	9.7	8.0	1.0	9.9	0.1	0.3	65	31	2.3	1.0	2.3	-2.0
85	85.3	8.5	9.6	7.7	1.3	9.8	0.2	0.5	68	32	2.4	1.3	3.1	-2.6

Takes losses into account at cohort rate.  
Recruit quality categories: A is NSC mental groups 1-30, B is GED mental groups 1-30, C is NSC mental groups 31-40, and D is GED mental groups 31-40.  
Cg and D quality recruits are assumed to be relatively cheap to obtain.  
Net savings equals (savings - reduction x \$2.5) minus (additional recruit cost).

TABLE 8

## STREAMLINED MEAN SURVIVAL TIMES FOR CLASS A SCHOOL ATTENDEES

<u>Mental Group</u>	<u>17-21</u>		<u>22+</u>	
	<u>HSG</u>	<u>GED</u>	<u>HSG</u>	<u>GED</u>
1	38	35	40	36
2	38	35	40	37
3U	39	35	40	36
3L	38	35	39	36
4	37	34	38	35

TABLE 9

## STREAMLINED MEAN SURVIVAL TIMES FOR NON-A SCHOOL ATTENDEES

<u>Mental Group</u>	<u>17-22</u>		<u>23+</u>	
	<u>HSG</u>	<u>GED</u>	<u>HSG</u>	<u>GED</u>
1	40	37	39	36
2	36	33	35	31
3U	36	33	35	32
3L	33	29	32	28
4	34	30	33	29

Reference 1 estimated the total (training and non-training) costs for A school attendees and non-A school attendees. Including RTC training but excluding recruiting costs, these figures are \$9600 and \$5100 for A school attendees and non-A school attendees, respectively.

Using these figures, tables 10 and 11 show the effects of possible qualifying scores on the relative cost of maintaining the same total woman-months of service. Both tables show that the lowest qualifying score minimizes cost since survival improves only slightly with increasing qualifying scores, while the cost of replacing the shortfall of recruits increases at a faster rate. This occurs because NPS females are already a highly screened population. Thus, it is no surprise that no further screening (at lower cost) is possible.

TABLE 10

CLASS A SCHOOL QUALIFYING SCORE EFFECTS PROJECTED FOR FY 1981 NPS FEMALES  
(Numbers in thousands, dollars in millions)

Qualifying score (months)	4-Year Survival			Additional recruits required <sup>b</sup>	Recruit goal - $\phi$ goal + Add'l recruits	Reduction from 3.5	Savings - Reduction x \$9.6	Projected 4-Year Endstrength	Percent of Goal <sup>c</sup>		Cost - \$2.9A + \$1.2C <sup>d</sup>	Additional Recruits		Net Savings <sup>d</sup>
	Z	$\phi$	Mean Z	Lost <sup>a</sup>	End- Strength				A	C		$\phi$	Cost	
34	100.0	5.5	38.0	62.1	2.1	0.0	0.0	2.1	63	26	2.1	0.0	0.0	0.0
36	90.3	5.0	38.4	61.6	1.9	0.5	0.0	2.1	69	28	2.3	0.5	1.2	-1.2
37	89.2	4.9	38.4	61.6	1.9	0.6	0.0	2.1	70	29	2.4	0.6	1.4	-1.4
38	80.3	4.4	38.5	60.9	1.7	1.0	0.1	2.1	78	22	2.5	1.0	2.5	-1.5

<sup>a</sup>This is the loss rate up to and including 4 years of service. Thus, for example, an individual who completes 4 years of obligated service but does not extend or reenlist is counted as a loss.

<sup>b</sup>This is the number of additional recruits necessary to maintain the total woman-months served (202,471 woman-months) by the entire A school cohort.

<sup>c</sup>Recruit quality categories: A is HSG mental groups 1-30, B is GED mental groups 1-30, C is HSG mental groups 31-4, and D is GED mental groups 31-4.

<sup>d</sup>A and D quality recruits are assumed to be relatively cheap to obtain.

<sup>e</sup>Net savings equals (savings - reduction x \$9.6) minus (additional recruits cost).

TABLE 11

**NON-A SCHOOL QUALIFYING SCORE EFFECTS PROJECTED FOR FY 1981 NPS FEMALES**  
(Numbers in thousands, dollars in millions)

Qualifying score (months)	Qualified			4-Year Survival			Additional recruits required <sup>b</sup>	Recruit goal = # qualified + Add'l recruits	Reduction from 3.4	Savings = Reduction x \$5.1	Projected 4-year Endstrength	Percent of Goal <sup>c</sup>		Cost = \$2.9A + \$1.2C <sup>d</sup>	Additional Recruits		Net Savings <sup>d</sup>
	Z	I	J	Mean mos.	% Lost <sup>a</sup>	End- Strength						A	C		#	Cost	
28	100.0	3.4	34.4	67.3	1.1	0.0	0.0	3.4	0.0	0.0	1.1	53	31	1.9	0.0	0.0	0.0
30	95.4	3.2	34.6	66.9	1.1	0.2	0.2	3.4	0.0	0.0	1.1	56	32	2.0	0.2	0.4	-0.4
32	94.2	3.2	34.7	66.8	1.1	0.2	0.2	3.4	0.0	0.0	1.1	56	33	2.0	0.2	0.4	-0.4
33	90.2	3.1	34.8	66.5	1.0	0.3	0.3	3.4	0.0	0.0	1.1	59	31	2.1	0.3	0.6	-0.6

<sup>a</sup>This is the loss rate up to and including 4 years of service. Thus, for example, an individual who completes 4 years of obligated service but does not extend or reenlist is counted as a loss.

<sup>b</sup>This is the number of additional recruits necessary to maintain the total woman-months served (113,563 woman-months) by the entire A school cohort.

<sup>c</sup>Recruit quality categories: A is HSG mental groups 1-30, B is GED mental groups 1-30, C is HSG mental groups 31-4, and D is GED mental groups 31-4.

<sup>d</sup>Net savings equals (savings = reduction x \$5.1) minus (additional recruits cost).

## CONCLUSIONS

1. Due to the fact that NPS females are already highly screened, no further screening of these recruits is feasible.
2. Educational level has the greatest impact on survival for both A school and non-A school attendees. Recruits with a high school diploma survive an average of 3-4 months longer than those with a GED.
3. For A school attendees, survival across mental groups is essentially constant. A downward trend in survival as mental group declines is apparent for non-A school attendees.
4. As age increases, there appears to be a generally increasing trend in survival for A school attendees. Non-A school attendees exhibit the opposite pattern of survival with respect to age, but to a lesser degree.



#### REFERENCES

- [1] CNA, Research Contribution 450, "Continuous Estimates of Survival Through Eight Years of Service Using FY 1979 Cross-Sectional Data," by Philip M. Lurie, Unclassified, Jul 1981
- [2] CNA, Memorandum (CNA)81-0151, "AFQTease," by Robert F. Lockman and Kathye D. Rutledge, Unclassified, 5 Feb 1981
- [3] CNA, Research Contribution 402, "Non-Parametric Methods for Estimating Recruit Survival With Cross-Sectional Data," by Philip M. Lurie, Unclassified, Sep 1979

**APPENDIX A**

**COEFFICIENT ESTIMATES FROM THE PROBIT ANALYSIS OF  
CHANCES OF COMPLETING RTC**

TABLE A-1  
COEFFICIENT ESTIMATES FROM THE PROBIT ANALYSIS OF  
CHANCES OF COMPLETING RTC

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u><math>\chi^2</math><sup>a</sup></u>
Constant	0.76937	0.08278	86.381
MGRP1	0.21231	0.10740	3.908
MGRP2	0.20424	0.06516	9.633
MGRP3U	0.10490	0.06498	2.606
MGRP3L	0.00452	0.06611	0.005
HSG	0.44413	0.04332	105.110
AGE18	0.05674	0.06581	0.743
AGE19	-0.03628	0.06906	0.276
AGE20	0.02092	0.07535	0.077
AGE21	0.04113	0.08743	0.221
AGE22	-0.07314	0.08623	0.719
AGE23	-0.11516	0.09259	1.547
AGE24	-0.07188	0.11047	0.423
AGE25P	-0.17358	0.08137	4.551

<sup>a</sup>All chi-squared ( $\chi^2$ ) values in this and subsequent tables have one degree of freedom. The five percent significance level of a  $\chi^2$  distribution with one degree of freedom is 3.841. All  $\chi^2$  values greater than 3.841 are considered significant.

**APPENDIX B**

**COEFFICIENT ESTIMATES FROM THE COX REGRESSION ANALYSIS OF  
SURVIVAL FOR A SCHOOL ATTENDEES**

TABLE B-1

COX REGRESSION COEFFICIENTS FOR A SCHOOL ATTENDEES:  
2-12 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	0.56366	0.25244	4.985
MGRP2	0.15015	0.18519	0.657
MGRP3U	-0.28628	0.20328	1.983
MGRP3L	0.06995	0.20223	0.120
HSG	-0.28237	0.14563	3.760
AGE18	-0.05152	0.18050	0.081
AGE19	-0.25528	0.19964	1.635
AGE20	-0.54094	0.22980	5.541
AGE21	-0.29341	0.24454	1.440
AGE22	-0.27860	0.25842	1.162
AGE23	-0.37235	0.28929	1.657
AGE24	-0.24182	0.31971	0.572
AGE25P	-0.77754	0.28425	7.483

TABLE B-2

COX REGRESSION COEFFICIENTS FOR A SCHOOL ATTENDEES:  
12-24 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	-0.28439	0.40357	0.497
MGRP2	-0.21771	0.29738	0.536
MGRP3U	-0.19002	0.30445	0.390
MGRP3L	-0.27577	0.32706	0.711
HSG	-0.64476	0.18825	11.731
AGE18	-0.16981	0.28839	0.347
AGE19	0.15238	0.28857	0.279
AGE20	0.13787	0.31444	0.192
AGE21	0.50523	0.30750	2.699
AGE22	-0.26537	0.40351	0.433
AGE23	0.38335	0.36932	1.077
AGE24	-0.16736	0.47935	0.122
AGE25P	-0.00224	0.34374	0.000

TABLE B-3

COX REGRESSION COEFFICIENTS FOR A SCHOOL ATTENDEES:  
24-36 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	-0.96793	0.58069	2.778
MGRP2	-0.08865	0.31017	0.082
MGRP3U	-0.03537	0.31954	0.012
MGRP3L	0.09634	0.33022	0.085
HSG	-0.01565	0.27425	0.003
AGE18	-0.37715	0.28245	1.783
AGE19	-0.37151	0.29112	1.629
AGE20	-0.19575	0.30843	0.403
AGE21	-0.99358	0.38949	6.507
AGE22	-0.11709	0.34563	0.115
AGE23	-0.76246	0.45327	2.830
AGE24	-0.93178	0.56811	2.690
AGE25P	-0.77998	0.40036	3.795

TABLE B-4

COX REGRESSION COEFFICIENTS FOR A SCHOOL ATTENDEES:  
36-48 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	-0.07104	0.37444	0.036
MGRP2	-0.11791	0.21836	0.292
MGRP3U	-0.10917	0.23148	0.222
MGRP3L	-0.21193	0.25299	0.702
HSG	0.13551	0.32719	0.172
AGE18	-0.33862	0.29057	1.358
AGE19	-0.27325	0.30163	0.821
AGE20	-0.29665	0.32325	0.842
AGE21	-0.01804	0.32183	0.003
AGE22	-0.35159	0.35905	0.959
AGE23	-0.28846	0.39184	0.542
AGE24	-0.87510	0.56513	2.398
AGE25P	-0.33189	0.34037	0.951

TABLE B-5

COX REGRESSION COEFFICIENTS FOR A SCHOOL ATTENDEES:  
48-60 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	0.14235	0.22187	0.412
MGRP2	0.14235	0.22187	0.412
MGRP3U	0.32248	0.23441	1.893
MGRP3L	0.36225	0.22810	2.522
HSG	0.08884	0.23979	0.137
AGE18	-0.19266	0.22780	0.715
AGE19	-0.43202	0.24432	3.127
AGE20	-0.22242	0.25376	0.768
AGE21	-0.59191	0.28889	4.198
AGE22	-0.35494	0.29373	1.460
AGE23	-0.96643	0.39389	6.020
AGE24	-0.24003	0.32518	0.545
AGE25P	-0.77261	0.29087	7.055

**APPENDIX C**

**COEFFICIENT ESTIMATES FROM THE COX REGRESSION ANALYSIS OF  
SURVIVAL FOR NON-A SCHOOL ATTENDEES**



TABLE C-1

COX REGRESSION COEFFICIENTS FOR NON-A SCHOOL ATTENDEES:  
2-12 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	-0.15792	0.48071	0.108
MGRP2	0.00039	0.27503	0.000
MGRP3U	-0.09231	0.26985	0.117
MGRP3L	0.16024	0.26877	0.355
HSG	-0.53558	0.13764	15.141
AGE18	-0.09796	0.21206	0.213
AGE19	-0.19901	0.23045	0.746
AGE20	-0.17055	0.24679	0.478
AGE21	-0.03339	0.26828	0.015
AGE22	0.04459	0.27753	0.026
AGE23	0.26600	0.28889	0.848
AGE24	0.25434	0.34460	0.545
AGE25P	0.17199	0.26509	0.421

TABLE C-2

COX REGRESSION COEFFICIENTS FOR NON-A SCHOOL ATTENDEES:  
12-24 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	-1.16799	1.04399	1.252
MGRP2	-0.08730	0.32542	0.072
MGRP3U	-0.03337	0.31591	0.011
MGRP3L	0.23148	0.31538	0.539
HSG	-0.24199	0.20185	1.437
AGE18	-0.05371	0.30515	0.031
AGE19	0.18473	0.30418	0.369
AGE20	0.01951	0.32976	0.004
AGE21	0.08670	0.35503	0.060
AGE22	-0.37749	0.44470	0.721
AGE23	0.22538	0.42585	0.280
AGE24	0.23187	0.44746	0.273
AGE25P	0.14717	0.36997	0.158

TABLE C-3

COX REGRESSION COEFFICIENTS FOR NON-A SCHOOL ATTENDEES:  
24-36 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	-1.60499	1.04711	2.349
MGRP2	-0.97552	0.37379	6.811
MGRP3U	-0.77479	0.35853	4.670
MGRP3L	-0.21628	0.34070	0.403
HSG	-0.36286	0.27267	1.771
AGE18	0.26535	0.38152	0.484
AGE19	-0.11248	0.40387	0.078
AGE20	-0.07509	0.44569	0.028
AGE21	0.55226	0.44653	1.530
AGE22	-0.04868	0.55998	0.008
AGE23	0.00838	0.60420	0.000
AGE24	0.11814	0.60616	0.038
AGE25P	-0.37510	0.56409	0.442

TABLE C-4

COX REGRESSION COEFFICIENTS FOR NON-A SCHOOL ATTENDEES:  
36-48 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	0.51851	0.52509	0.975
MGRP2	-0.51255	0.32044	2.558
MGRP3U	-0.33107	0.31095	1.134
MGRP3L	-0.27782	0.30005	0.857
HSG	0.23961	0.38366	0.390
AGE18	-0.54273	0.51903	1.093
AGE19	-0.14340	0.51677	0.077
AGE20	-0.43906	0.55362	0.629
AGE21	0.04436	0.56086	0.006
AGE22	0.49937	0.55074	0.822
AGE23	-0.32144	0.65898	0.238
AGE24	0.33656	0.64207	0.275
AGE25P	-0.06713	0.61918	0.012

TABLE C-5

COX REGRESSION COEFFICIENT FOR NON-A SCHOOL ATTENDEES:  
48-60 MONTHS

<u>Variable</u>	<u>Coefficient</u>	<u>Standard Deviation</u>	<u>x<sup>2</sup></u>
MGRP1	0.16998	0.33022	0.265
MGRP2	0.16998	0.33022	0.265
MGRP3U	0.18418	0.35779	0.265
MGRP3L	0.13159	0.31782	0.171
HSG	-0.08515	0.34623	0.060
AGE18	0.02922	0.41379	0.005
AGE19	-0.00479	0.41737	0.000
AGE20	-0.33973	0.50569	0.451
AGE21	-0.93317	0.57619	2.623
AGE22	0.06917	0.54328	0.016
AGE23	-0.63482	0.62689	1.025
AGE24	-0.07173	0.58940	0.015
AGE25P	-0.64025	0.57467	1.241

**APPENDIX D**

**YEARLY SURVIVAL ESTIMATES FOR A SCHOOL ATTENDEES**

TABLE D-1

## PROBABILITIES OF COMPLETING MORE THAN 1 YEAR OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.82	0.83	0.86	0.89	0.86	0.86	0.87	0.85	0.91
	HSG	0.86	0.87	0.89	0.92	0.89	0.89	0.90	0.89	0.93
2	GED	0.88	0.88	0.90	0.93	0.91	0.90	0.91	0.90	0.94
	HSG	0.90	0.91	0.93	0.94	0.93	0.93	0.93	0.92	0.95
3U	GED	0.92	0.92	0.94	0.95	0.94	0.94	0.94	0.93	0.96
	HSG	0.94	0.94	0.95	0.96	0.95	0.95	0.96	0.95	0.97
3L	GED	0.88	0.89	0.91	0.93	0.91	0.91	0.92	0.91	0.94
	HSG	0.91	0.92	0.93	0.95	0.93	0.93	0.94	0.93	0.96
4	GED	0.89	0.90	0.91	0.94	0.92	0.92	0.92	0.91	0.95
	HSG	0.92	0.92	0.93	0.95	0.94	0.94	0.94	0.93	0.96

TABLE D-2

## PROBABILITIES OF COMPLETING MORE THAN 2 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.65	0.68	0.66	0.68	0.59	0.72	0.62	0.70	0.73
	HSG	0.76	0.78	0.77	0.80	0.73	0.81	0.76	0.80	0.83
2	GED	0.69	0.72	0.68	0.70	0.61	0.75	0.64	0.73	0.74
	HSG	0.80	0.82	0.80	0.81	0.75	0.84	0.77	0.83	0.84
3U	GED	0.70	0.74	0.69	0.70	0.60	0.76	0.64	0.75	0.74
	HSG	0.81	0.84	0.81	0.82	0.75	0.85	0.78	0.84	0.84
3L	GED	0.69	0.72	0.68	0.70	0.61	0.75	0.64	0.74	0.74
	HSG	0.80	0.82	0.80	0.82	0.75	0.84	0.78	0.83	0.84
4	GED	0.65	0.68	0.63	0.65	0.54	0.72	0.57	0.70	0.69
	HSG	0.77	0.80	0.77	0.78	0.71	0.82	0.73	0.81	0.81

TABLE D-3

## PROBABILITIES OF COMPLETING MORE THAN 3 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25P</u>
1	GED	0.58	0.63	0.61	0.62	0.57	0.65	0.59	0.67	0.69
	HSG	0.68	0.72	0.71	0.73	0.70	0.73	0.72	0.77	0.79
2	GED	0.52	0.59	0.56	0.56	0.55	0.58	0.56	0.66	0.65
	HSG	0.60	0.68	0.66	0.65	0.68	0.66	0.68	0.74	0.74
3U	GED	0.51	0.59	0.55	0.54	0.53	0.57	0.55	0.66	0.64
	HSG	0.59	0.67	0.65	0.63	0.67	0.65	0.67	0.75	0.73
3L	GED	0.48	0.56	0.53	0.52	0.53	0.55	0.54	0.64	0.63
	HSG	0.56	0.64	0.63	0.61	0.66	0.61	0.66	0.72	0.72
4	GED	0.46	0.54	0.50	0.49	0.48	0.53	0.49	0.61	0.59
	HSG	0.56	0.64	0.61	0.60	0.63	0.62	0.63	0.71	0.70

TABLE D-4

## PROBABILITIES OF COMPLETING MORE THAN 4 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25P</u>
1	GED	0.32	0.41	0.39	0.40	0.32	0.43	0.38	0.53	0.45
	HSG	0.35	0.45	0.43	0.44	0.36	0.46	0.43	0.58	0.49
2	GED	0.30	0.40	0.37	0.37	0.31	0.39	0.37	0.52	0.43
	HSG	0.32	0.43	0.40	0.40	0.36	0.42	0.42	0.57	0.47
3U	GED	0.26	0.36	0.33	0.32	0.27	0.35	0.33	0.49	0.39
	HSG	0.27	0.38	0.36	0.35	0.31	0.37	0.37	0.54	0.42
3L	GED	0.26	0.36	0.33	0.33	0.29	0.35	0.34	0.49	0.40
	HSG	0.27	0.39	0.36	0.36	0.33	0.37	0.39	0.54	0.43
4	GED	0.22	0.31	0.28	0.28	0.22	0.31	0.28	0.44	0.34
	HSG	0.23	0.34	0.31	0.31	0.26	0.33	0.33	0.49	0.37

TABLE D-5

## PROBABILITIES OF COMPLETING MORE THAN 5 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.15	0.22	0.23	0.21	0.21	0.25	0.28	0.28	0.31
	HSG	0.15	0.22	0.24	0.22	0.23	0.25	0.31	0.29	0.33
2	GED	0.13	0.21	0.22	0.19	0.20	0.23	0.27	0.28	0.30
	HSG	0.13	0.21	0.23	0.20	0.22	0.23	0.30	0.29	0.31
3U	GED	0.12	0.19	0.20	0.17	0.18	0.20	0.24	0.27	0.27
	HSG	0.11	0.19	0.20	0.18	0.19	0.20	0.27	0.27	0.28
3L	GED	0.11	0.18	0.19	0.17	0.18	0.20	0.25	0.26	0.27
	HSG	0.11	0.19	0.20	0.18	0.20	0.20	0.27	0.27	0.28
4	GED	0.12	0.20	0.19	0.18	0.16	0.21	0.22	0.28	0.26
	HSG	0.12	0.20	0.21	0.19	0.19	0.21	0.26	0.30	0.28

TABLE D-6

## PROBABILITIES OF COMPLETING MORE THAN 6 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.10	0.15	0.16	0.15	0.14	0.17	0.20	0.20	0.22
	HSG	0.10	0.15	0.17	0.15	0.16	0.17	0.22	0.20	0.23
2	GED	0.09	0.14	0.15	0.14	0.14	0.16	0.19	0.19	0.21
	HSG	0.09	0.15	0.16	0.14	0.16	0.16	0.21	0.20	0.22
3U	GED	0.08	0.13	0.14	0.12	0.12	0.14	0.17	0.18	0.19
	HSG	0.08	0.13	0.14	0.12	0.13	0.14	0.19	0.19	0.19
3L	GED	0.08	0.13	0.14	0.12	0.13	0.14	0.17	0.18	0.19
	HSG	0.08	0.13	0.14	0.12	0.14	0.14	0.19	0.19	0.20
4	GED	0.08	0.14	0.13	0.12	0.11	0.14	0.16	0.20	0.18
	HSG	0.09	0.14	0.15	0.13	0.13	0.15	0.18	0.21	0.19

TABLE D-7

## PROBABILITIES OF COMPLETING MORE THAN 7 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25P</u>
1	GED	0.08	0.12	0.13	0.12	0.11	0.14	0.16	0.16	0.18
	HSG	0.08	0.12	0.14	0.12	0.13	0.14	0.17	0.16	0.18
2	GED	0.08	0.12	0.12	0.11	0.11	0.13	0.15	0.16	0.17
	HSG	0.08	0.12	0.13	0.11	0.13	0.13	0.17	0.16	0.18
3U	GED	0.07	0.11	0.11	0.10	0.10	0.11	0.14	0.15	0.15
	HSG	0.06	0.11	0.11	0.10	0.11	0.11	0.15	0.15	0.16
3L	GED	0.06	0.10	0.11	0.10	0.10	0.11	0.14	0.14	0.15
	HSG	0.06	0.10	0.11	0.10	0.11	0.11	0.15	0.15	0.16
4	GED	0.07	0.11	0.11	0.10	0.09	0.12	0.12	0.16	0.15
	HSG	0.07	0.11	0.12	0.11	0.10	0.12	0.14	0.17	0.16

TABLE D-8

## PROBABILITIES OF COMPLETING MORE THAN 8 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25P</u>
1	GED	0.04	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08
	HSG	0.04	0.06	0.07	0.06	0.06	0.07	0.08	0.08	0.09
2	GED	0.04	0.06	0.06	0.05	0.05	0.06	0.07	0.07	0.08
	HSG	0.04	0.06	0.06	0.05	0.06	0.06	0.08	0.08	0.08
3U	GED	0.03	0.05	0.05	0.05	0.05	0.05	0.07	0.07	0.07
	HSG	0.03	0.05	0.05	0.05	0.05	0.05	0.07	0.07	0.07
3L	GED	0.03	0.05	0.05	0.05	0.05	0.05	0.07	0.07	0.07
	HSG	0.03	0.05	0.05	0.05	0.05	0.05	0.07	0.07	0.08
4	GED	0.03	0.05	0.05	0.05	0.04	0.06	0.06	0.08	0.07
	HSG	0.03	0.05	0.06	0.05	0.05	0.06	0.07	0.08	0.07



**APPENDIX E**

**YEARLY SURVIVAL ESTIMATES FOR NON-A SCHOOL ATTENDEES**

TABLE E-1

## PROBABILITIES OF COMPLETING MORE THAN 1 YEAR OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.88	0.89	0.90	0.89	0.88	0.87	0.84	0.84	0.85
	HSG	0.93	0.93	0.94	0.94	0.93	0.92	0.90	0.90	0.91
2	GED	0.86	0.87	0.88	0.88	0.86	0.85	0.82	0.82	0.83
	HSG	0.91	0.92	0.93	0.93	0.92	0.91	0.89	0.89	0.90
3U	GED	0.87	0.88	0.89	0.89	0.87	0.86	0.83	0.83	0.84
	HSG	0.92	0.93	0.93	0.93	0.92	0.92	0.90	0.90	0.91
3L	GED	0.83	0.85	0.86	0.86	0.84	0.83	0.79	0.79	0.81
	HSG	0.90	0.91	0.92	0.91	0.90	0.89	0.87	0.87	0.88
4	GED	0.86	0.87	0.88	0.86	0.86	0.85	0.82	0.82	0.83
	HSG	0.91	0.92	0.93	0.93	0.92	0.91	0.89	0.89	0.90

TABLE E-2

## PROBABILITIES OF COMPLETING MORE THAN 2 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.80	0.81	0.80	0.81	0.80	0.82	0.75	0.75	0.77
	HSG	0.86	0.87	0.86	0.87	0.86	0.88	0.83	0.83	0.84
2	GED	0.65	0.67	0.63	0.66	0.64	0.71	0.58	0.58	0.61
	HSG	0.74	0.75	0.72	0.74	0.73	0.79	0.68	0.68	0.70
3U	GED	0.67	0.69	0.65	0.68	0.65	0.72	0.60	0.60	0.62
	HSG	0.75	0.76	0.73	0.76	0.74	0.80	0.69	0.69	0.71
3L	GED	0.59	0.81	0.57	0.60	0.58	0.65	0.51	0.51	0.54
	HSG	0.69	0.70	0.66	0.69	0.67	0.74	0.62	0.62	0.65
4	GED	0.65	0.67	0.63	0.66	0.64	0.71	0.58	0.58	0.61
	HSG	0.74	0.75	0.72	0.75	0.73	0.79	0.68	0.68	0.70

TABLE E-3

## PROBABILITIES OF COMPLETING MORE THAN 3 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.69	0.87	0.70	0.71	0.61	0.71	0.64	0.63	0.69
	HSG	0.78	0.76	0.78	0.79	0.72	0.79	0.74	0.73	0.78
2	GED	0.49	0.47	0.49	0.51	0.39	0.54	0.44	0.42	0.50
	HSG	0.61	0.58	0.60	0.62	0.52	0.65	0.56	0.55	0.61
3U	GED	0.53	0.50	0.53	0.54	0.43	0.57	0.47	0.46	0.53
	HSG	0.64	0.62	0.63	0.65	0.55	0.68	0.59	0.58	0.64
3L	GED	0.39	0.36	0.39	0.41	0.28	0.44	0.34	0.32	0.41
	HSG	0.51	0.48	0.51	0.53	0.41	0.57	0.46	0.45	0.53
4	GED	0.39	0.34	0.40	0.41	0.26	0.43	0.35	0.33	0.43
	HSG	0.52	0.47	0.52	0.53	0.39	0.56	0.47	0.45	0.55

TABLE E-4

## PROBABILITIES OF COMPLETING MORE THAN 4 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.23	0.35	0.27	0.35	0.19	0.11	0.29	0.13	0.25
	HSG	0.19	0.34	0.23	0.32	0.16	0.08	0.27	0.10	0.21
2	GED	0.33	0.37	0.35	0.40	0.26	0.28	0.33	0.24	0.35
	HSG	0.37	0.44	0.39	0.45	0.31	0.29	0.39	0.27	0.38
3U	GED	0.31	0.37	0.33	0.39	0.25	0.24	0.32	0.22	0.32
	HSG	0.33	0.42	0.35	0.42	0.28	0.23	0.36	0.23	0.34
3L	GED	0.22	0.26	0.24	0.29	0.16	0.18	0.23	0.15	0.24
	HSG	0.25	0.32	0.28	0.34	0.20	0.18	0.28	0.17	0.27
4	GED	0.19	0.22	0.21	0.26	0.12	0.13	0.20	0.12	0.22
	HSG	0.20	0.27	0.23	0.29	0.15	0.12	0.24	0.12	0.23

TABLE E-5

## PROBABILITIES OF COMPLETING MORE THAN 5 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.09	0.14	0.11	0.18	0.14	0.04	0.18	0.06	0.15
	HSG	0.08	0.14	0.10	0.18	0.12	0.03	0.17	0.05	0.14
2	GED	0.14	0.15	0.14	0.21	0.18	0.11	0.20	0.11	0.22
	HSG	0.16	0.19	0.17	0.25	0.22	0.12	0.25	0.13	0.25
3U	GED	0.13	0.15	0.14	0.21	0.18	0.10	0.20	0.10	0.21
	HSG	0.15	0.18	0.16	0.24	0.20	0.10	0.24	0.11	0.22
3L	GED	0.10	0.11	0.11	0.16	0.11	0.07	0.15	0.07	0.16
	HSG	0.12	0.15	0.13	0.20	0.15	0.08	0.19	0.08	0.18
4	GED	0.09	0.11	0.10	0.15	0.09	0.06	0.14	0.06	0.15
	HSG	0.11	0.14	0.12	0.18	0.11	0.06	0.17	0.07	0.16

TABLE E-6

## PROBABILITIES OF COMPLETING MORE THAN 6 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		17	18	19	20	21	22	23	24	25P
1	GED	0.07	0.10	0.08	0.14	0.10	0.03	0.13	0.04	0.11
	HSG	0.06	0.11	0.08	0.13	0.09	0.02	0.13	0.04	0.10
2	GED	0.10	0.11	0.11	0.16	0.14	0.08	0.15	0.08	0.16
	HSG	0.12	0.14	0.13	0.19	0.16	0.09	0.19	0.09	0.18
3U	GED	0.10	0.11	0.11	0.16	0.13	0.07	0.15	0.07	0.15
	HSG	0.11	0.14	0.12	0.18	0.15	0.07	0.18	0.08	0.17
3L	GED	0.07	0.08	0.08	0.12	0.09	0.05	0.11	0.05	0.12
	HSG	0.09	0.11	0.10	0.15	0.11	0.06	0.14	0.06	0.14
4	GED	0.07	0.08	0.08	0.12	0.07	0.04	0.10	0.04	0.11
	HSG	0.08	0.10	0.09	0.14	0.08	0.04	0.13	0.05	0.12

TABLE E-7

## PROBABILITIES OF COMPLETING MORE THAN 7 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25P</u>
1	GED	0.04	0.06	0.05	0.08	0.06	0.02	0.08	0.02	0.07
	HSG	0.04	0.06	0.04	0.08	0.05	0.01	0.07	0.02	0.06
2	GED	0.06	0.06	0.06	0.09	0.08	0.05	0.09	0.05	0.09
	HSG	0.07	0.08	0.07	0.11	0.09	0.05	0.11	0.05	0.11
3U	GED	0.06	0.07	0.06	0.09	0.08	0.04	0.09	0.04	0.09
	HSG	0.06	0.08	0.07	0.10	0.09	0.04	0.10	0.05	0.10
3L	GED	0.04	0.05	0.05	0.07	0.05	0.03	0.06	0.03	0.07
	HSG	0.05	0.06	0.06	0.08	0.06	0.03	0.08	0.04	0.08
4	GED	0.04	0.05	0.04	0.07	0.04	0.03	0.06	0.03	0.06
	HSG	0.04	0.06	0.05	0.08	0.05	0.03	0.07	0.03	0.07

TABLE E-8

## PROBABILITIES OF COMPLETING MORE THAN 8 YEARS OF SERVICE

Mental Group	Educational Level	Age								
		<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25P</u>
1	GED	0.03	0.04	0.03	0.06	0.04	0.01	0.05	0.02	0.05
	HSG	0.03	0.04	0.03	0.05	0.04	0.01	0.05	0.01	0.04
2	GED	0.04	0.04	0.04	0.06	0.06	0.03	0.06	0.03	0.07
	HSG	0.05	0.06	0.05	0.08	0.07	0.04	0.08	0.04	0.08
3U	GED	0.04	0.05	0.04	0.06	0.05	0.03	0.06	0.03	0.06
	HSG	0.05	0.06	0.05	0.07	0.06	0.03	0.07	0.03	0.07
3L	GED	0.03	0.03	0.03	0.05	0.03	0.02	0.04	0.02	0.05
	HSG	0.04	0.05	0.04	0.06	0.04	0.02	0.06	0.03	0.06
4	GED	0.03	0.03	0.03	0.05	0.03	0.02	0.04	0.02	0.05
	HSG	0.03	0.04	0.04	0.06	0.03	0.02	0.05	0.02	0.05

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